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memorandum

date September 10, 2009

to Chehalis River Basin Flood Authority

from Board Advisory Committee and ESA Adolfson

subject Local Projects and Budget

At the Flood Authority work session on July 18, 2009, the Flood Authority discussed their role in funding small local projects. The Authority asked the BAC to use the prioritization process agreed to by the Flood Authority to rank the list of small local projects. The BAC attempted to do so at the BAC meeting on August 6, 2009. This memo is a summary of that effort.

The BAC started with a list of 28 projects, consisting of the local structural projects and those nonstructural projects that included a construction element. The projects on this list are referred to as the Potential Action-Ready projects. The BAC started with the three yes/no questions from the prioritization process to see if any of the projects would have sufficient information to go to the next level of analysis using the criteria table. The three questions are:

- Is the project sufficiently defined?
- Is there an identified implementing agency or agencies?
- Is the timeline of the project acceptable to the Flood Authority?

The BAC found it very difficult to answer the first three questions for the projects on the list. Though several projects were better defined than others, none of the projects had enough information to really understand them, let alone rank them. For example, the BAC determined that engineering and design studies would be needed to really know if a project is worth pursuing.

After much discussion, it became clear that the prioritization tool is designed to compare projects that have undergone considerable definition and analysis -- meaning that they are "shovel ready," or nearly so. The tool was designed to compare projects that could be undertaken to mitigate flood damages and thus help the decision makers prioritize their efforts across the basin.

The list of local projects was developed by reviewing projects identified in local Comprehensive Flood Hazard Management Plans and by asking local jurisdictions (and the public) to fill out a form giving some general information about "potential projects." This was a process to solicit ideas and potential projects throughout the basin so as not to overlook a good idea or possibility. There was no requirement that the project come with extensive work being done to clearly define it, analyze it and have it shovel ready.

So why did the Flood Authority ask for these project ideas? After much discussion it was clear there were several good reasons to do it (none of which related to ranking the projects at this time):

1. To know what people are thinking about and not to lose good ideas.
2. To be sure the Flood Authority was looking across the whole basin so a basin wide solution could be obtained in the future.
3. To keep a place holder for future funding by listing the projects in the Flood Plan and in the basin wide General Investigation. Thus projects could compete for funds from the USACE, a Flood District formed in the future (or some other form of governance and finance), and/or be used as match if they were part of a basin wide package.

The BAC concluded, and would recommend, that it is important to keep the list of local projects for the future, but it is not possible, nor desirable, to prioritize them using the prioritization criteria at this time.

The BAC also concluded that it would take a considerable effort to get enough information on these projects to prioritize them. The cost to jurisdictions would be substantial and they probably do not have the staff or money to do so at this time. Further, asking them to do so would only heighten expectations that the Flood Authority had resources and would fund the projects if jurisdictions could supply the analysis.

The BAC also noted that ESA Adolfson does not have this effort in their current scope of work and would need a sizeable increase in budget to undertake the coordination and analysis it would require.

The BAC concluded that the Flood Authority was using its funds wisely and in a judicious manner with the projects and studies underway. The Flood Authority is funding basin-wide studies, which is the purpose stated in the funding legislation. The Authority is also pursuing an early warning system project that will provide benefit to basin residents in the short-term. The BAC noted that almost all of the budget was either being spent or allotted to accomplish this current work – thus there is only a small amount of money (if any) that would be prudent to use for some local project at this time.

While asking local jurisdictions to spend the time and money to define projects adequately to prioritize them would have the undesirable consequence of raising expectations that the Flood Authority could not meet, the Flood Authority had also the expressed desire to try and fund some kind of "pilot" project. The BAC suggests that the Flood Authority review the budget and determine (independent of the prioritization process) if they want to undertake a "pilot project".

Attached:
Flood Authority Approved Studies & Projects Budget
Potential Action-Ready Projects

Flood Authority Approved Studies & Projects Budget

Study/Project	Estimated Cost
Upstream Storage Dam Feasibilty Phase 2A	$250,000
Upstream Storage Dam Feasibilty Phase 2B	$230,000
Early Warning Program	$250,000
Seamless LiDAR coverage	$176,441
Lower Basin Hydraulic model	$300,000
Decision Support Tool (Hydrologic Model)	$0
Analysis of Ecosystem Services	$75,000
Skookumchuck Dam Modification Feasibility	$25,000
Total	**$1,306,441**

Potential Action-Ready Projects

#	Project Name	Geographic Area	Project Description
1	Salzer Creek backwater control		
2	Provide increased on-site detention and retention		
3	Build an overtopping levee at the north end of town	Within the town of Bucoda	
4	Install twin 18-inch culverts under Main Street at 11th	Within the town of Bucoda	
5	Relief Culvert for North Side Runoff	Within the city of Oakville	Improve, and lengthen, the drainage system that transports the runoff from the north side of the city in the south side. Install new drainage inlets along near the railroad track and improve the existing system that carries the stormwater to the south side of the city.
6	Harris Creek Fish Enhancement	Within the city of Oakville	Replace the existing culvert under State Street, at Harris Creek, and replace them with a three-sided structure.
7	Sickman-Ford Bridge Culvert	Within the City of Oakville	Install four three-sided structures in the northerly approach to the Sickman-Ford Bridge
8	River braiding	Wynoochee and Satsop rivers	Open old migration channels
9	Culvert projects on Hiram Hill	Hiram Hill in Grays Harbor County	
10	Montesano WWTP	Montesano	Raise the height of dikes around, or otherwise protect, the Montesano WWTP
11	Adna Levee Improvement	Adna	The Adna levee is a railroad grade that does not currently function as a flood protection levee. This project would improve the railroad grade to provide flood control. To become a flood control structure, the following improvements must be made: A. Determine a public sponsor and acquire easements; B. Add interior drainage; C. Clear the embankment of overgrown vegetation and develop an annual vegetation maintenance program; D. The slope must be repaired to a minimum 2H:1V slope; E. Additional post flood repair work including grading, slope work and crown work Once these improvements have been made, the structure will be eligible for the PL 84-99 program if a sponsor can be found.
12	Build open spans or box culverts on State Route 12		
13	Tilley Road Culvert Replacement	Thurston County	
14	Develop a technical assistance program for bank stabilization and/or debris removal	Basin-wide.	

#	Project Name	Geographic Area	Project Description
15	Incorporate biostabilization and other engineered solutions to stabilize banks	Basin-wide.	
16	Provide long-term stabilization of the Wynoochee River banks to protect City sewage facilities	Montesano.	
17	Streambank Stabilization		
18	Mary's River Lumber bank protection	¼-mile of Chehalis River in Montesano	Steel plate protection or rip-rap protection
19	Independence Road Bank Protection Project	Independence Road between Michigan Hill and 201st Street in Thurston County.	Feasibility Study to realign Independence Road between Michigan Hill Road and south of 201st Street and buy private properties impacted by loss of access. The realignment would be put of the flood plain and the active channel meander zone of the Chehalis River.
20	Open Migration Zone of the Satsop	Satsop River	Remove or mitigate man-made obstacles in the Satsop River
21	Dredge Lake Sylvia	Lake Sylvia, near Montesano	
22	City Hall Generator		Install generator at City Hall for Emergency Operations Center
23	Drinking water reservoir		Construct drinking water reservoir on city property
24	Generator at Grays Harbor Fairgrounds	Grays Harbor Fairgrounds	
25	Critter pads		
26	Regrade Main Street	Bucoda	
27	Moon Road / Easton 188th Roadway Raise in Elevation		Raise the elevation of the lower spots along Moon Road south of State Route 12 and the east end of 188th Ave SW. This project is in the Draft CFHMP for the Confederated Tribes of the Chehalis Reservation. Thurston County's understanding to date is that the elevation change would be on only the existing lower spots that food frequently. The raise in elevation would not be like the larger project that was accomplished on parallel Anderson Road. Some form of culverts may also be needed.
28	Protect access to Satsop Development Park	Grays Harbor County	Raise the elevation of the roadway to Satsop Development Park to maintain access during flood events.